of tree cotton and plants of cultivated (similar to Sea Island) cotton.

On February 13, 1914, at a scattering collection of houses and a "tienda" (country store) called Bejuquero, Central Chaparra, Oriente, I found in the dooryard of one of the houses, three cotton plants (similar to Sea Island) which had matured quite a number of bolls, but would probably mature very few more, as most of the squares had been punctured by the boll weevil. I collected eight adults, all but two of which were destroyed by "hormiga brava," *Solenopsis geminata*, a few days later. One cotton plant at Vedado, Central Chaparra, only about five miles from Bejuquero, examined February 20, showed no injury by the weevil and no adults were found. Some cotton plants in a dooryard in the village of Chaparra showed no injury by weevil and I found no adults. No cotton is grown commercially at Chaparra, so far as I was able to learn, although I enquired specifically regarding this point of Mr. Pupo, who has charge of all the sugar cane field inspection work, and I saw no other volunteer cotton plants during my stay of over three weeks at Central Chaparra.

I also visited the island of Jamaica during March, 1914. I found no boll weevils on any of the varieties of cotton grown at Hope Gardens, Kingston. Haytian cotton was most abundant, although I examined plants of Sea Island, or what was possibly Cuban commercial cotton, and of the ordinary upland variety of the South. I was informed that this was the only cotton on the island of Jamaica.

NOTES ON THE CHALCIDOID FAMILY CALLIMOMIDAE.

By J. C. Crawford, *U. S. National Museum.*

Since a new subfamily is described I have given, to locate this as well as two others characterized since the publication of Dr. Ashmead's monograph, a table based on his but much abbreviated. For additional characteristics his table should be consulted. Attention is again called to the fact that the Megastigminæ possess two well developed apical spurs on the hind tibiæ. No specimens of either the Pulvilligerinæ or the Eutanycorminæ have been seen and they are placed in this table solely from the original descriptions.

TABLE OF SUBFAMILIES.

1. Mesothoracic furrows not well defined, the scapulæ scarcely or indistinctly separated; abdomen in female conically pointed, ovipositor not exserted.....Ormyrinæ
   Mesothoracic furrows well defined..... 2
2. Hind tibiæ with one apical spur.....Erimerinæ new subf.
   Hind tibiæ with two apical spurs..... 3
3. Stigmal knob greatly dilated..... 4
   Stigmal knob not greatly dilated..... 5
4. Male antennæ with whorls of hair.....Pulvilligerinæ
   Male antennæ without whorls of hair.....Megastigminæ
5. Antennæ densely pilose; no postmarginal vein.....Eutanycorminæ
   Antennæ not densely pilose; postmarginal vein developed..... 6
6. Posterior margin of mesepisternum incised..... 7
   Posterior margin of mesepisternum straight..... 8
7. Stigmal vein long.....Idarninæ
   Stigmal vein short, the stigmal knob subsessile.....Callimominæ
8. Hind femora not much swollen, their tibiæ not arcuate.
   Monodontomerinæ
   Hind femora much swollen, their tibiæ arcuate.....Podagrioninæ

ERIMERINAE NEW SUBFAMILY.

ERIMERUS new genus.

Hind tibiæ with only one apical spur, this very well developed; antennæ 13 jointed, the ring joint distinctly longer than broad, but narrower than the first joint of the funicle; parapsidal furrows well defined; mesepisternum not excised on posterior margin; scutellum without a cross furrow; propodeum longitudinally rugulose; the postmarginal vein almost as long as the marginal which is short; stigmal knob subsessile, with two appendiculations; basal abdominal segment not excised medially at apex.

Type of the genus: *Torymus wickhami* Ashmead.

In addition to the two type specimens there are in the collection three females from Central, Utah, bred July 13, 1911, by Mr. C. N. Ainslie [under Webster no. 5010 (Bureau of Entomology, U. S. Department of Agriculture)] from galls on *Hilaria*.

TABLE OF GENERA OF THE MONODONTOMERINÆ.

1. Antennæ with 2 ring joints..... 2
   Antennæ with only 1 ring joint..... 4
2. Front femora much swollen, pronotum very long
   Plesiostigmodes Ashm.
   Not as above..... 3

3. Spiracles at extreme base of propodeum.....*Dimeromicrus* Cwfd.
Spiracles about their own length caudad of base of propodeum
Idiomacromerus new genus
4. Scutellum with a cross-furrow before apex..... 5
Scutellum without a cross-furrow before apex..... 8
5. Apical margin of first abdominal segment deeply incised medially.. 6
Apical margin of first abdominal segment not deeply incised medially 7
6. Spurs on hind tibiæ apical.....*Monodontomerus* Westw.
Spurs on hind tibiæ much before apex.....*Perissocentrus* Cwfd.
7. Hind femora with 2 large teeth.....*Physothorax* Mayr
Hind femora with 1 large tooth.....*Plesiostigma* Mayr
8. Metathorax with spiraclar sulci.....*Hemitorymus* Ashm.
Metathorax without spiraclar sulci..... 9
9. Occipital foramen surrounded by a carina..... 12
Occipital foramen not surrounded by a carina..... 10
10. First abdominal segment deeply incised medially at apex..... 11
First abdominal segment not incised medially at apex; propodeum not with 2 medial carinæ.....*Microdontomerus* Cwfd.
11. Propodeum medially bicarinate.....*Ditropinotus* Cwfd.
Propodeum medially not carinate.....*Antistrophoplex* new genus
12. Apical margin of first abdominal segment not incised medially..... 13
Apical margin of first segment incised medially..... 14
13. Eyes conspicuously hairy.....*Oligosthenus* Först
Eyes not conspicuously hairy.....*Cryptopristus* Först. ♂
14. Wings without a stigmal cloud..... 15
Wings with a stigmal cloud.....*Cryptopristus* Först. ♀
15. Hind femora with a large tooth or prominent dentiform angle; metathorax not with two medial carinæ..... 16
Hind femora without a large tooth or dentiform angle; metathorax with two medial carinæ ♀, in ♂ obsolete.....*Eridontomerus* Cwfd.
16. Propodeum with a medial carina.....*Zaglyptonotus* new genus
Propodeum not carinate medially..... 17
17. Hind femora basad of large tooth distinctly serrate.*Websterellus* Ashm.
Hind femora basad of large tooth not with small teeth or serrations
Holaspis Mayr.

Idiomacromerus new genus.

Occipital foramen margined, first abdominal segment incised medially at apex; hind femora on lower margin excised at apex; marginal vein much shorter than submarginal; postmarginal vein about half as long as marginal; stigma knob not subsessile, the stigmal vein almost as long as postmarginal; eyes hairy.

Type of the genus: *Idiomacromerus bimaculipennis* Crawford.

Idiomacromerus bimaculipennis n. sp.

Female: Length about 3.5 mm.; ovipositor 1.75 mm. Brilliant coppery with greenish in places, head and thorax rugoso-punctate, antennæ brown,

the scape and pedicel testaceous; first ring joint subquadrate, second transverse; funicular joints subquadrate; propodeum basally with short rugæ so the base appears as if with a row of pits; wings hyaline, with an irregular ovoid fumated spot at base of marginal vein and a fumation at postmarginal vein, this extending almost half way across wing and, turning centrad extends with decreasing intensity as far centrad as the base of the other spot, there being a narrow subhyaline space between them; legs coppery with the tips of femora, the tibiæ and tarsi, entirely testaceous.

One specimen labelled "23.6" (June 23). Type specimen Cat. No. 18168 U. S. N. M. Type locality: American Fork Canyon, Utah.

Antistrophoplex new genus.

Eyes bare; marginal vein short, the stigmal knob almost subsessile, postmarginal vein about half as long as marginal; hind tibial spurs rather short, the longer not half as long as the first joint of the tarsi.

Type: Antistrophoplex bicoloripes Crawford.

Antistrophoplex bicoloripes n. sp.

Female: Length about 3 mm.; ovipositor about 2.5 mm. Head and thorax bronzy-green, finely rugoso-punctate, antennæ brown, the scape reddish-testaceous, the pedicel greenish with the apex testaceous; pedicel longer than the first joint of the funicle, the funicular joints subquadrate; propodeum faintly reticulately aciculate; wings hyaline, marginal vein short, the postmarginal vein almost as long as the marginal, the stigmal shorter than postmarginal; coxæ and about the basal half of all femora greenish, apical half of femora and all of tibiæ reddish-testaceous; tarsi more whitish; abdomen greenish, dorsally and basally brown with a greenish reflection.

Type locality: Garden City, Kansas. Bred from galls of *Antistrophus* species. Type-specimen, Cat. No. 18169 U. S. N. M.

Described from six females received from the Bureau of Entomology, U. S. Department of Agriculture, under Chittenden No. 84, with the additional record, "bred from galls on a composite, collected September 14, 1913, by C. H. Popenoe."

Zaglyptonotus new genus.

Marginal vein about two-thirds as long as submarginal, stigmal knob subsessile; postmarginal short, hardly one-third as long as marginal; posterior tarsi about one-third longer than hind tibiæ, the first tarsal joint not quite as long as 2–5 combined; hind tibial spurs long, the longer as long as the first joint of the tarsus; hind femora with a minute tooth on lower margin near apex and excised beyond this.

Type: Zaglyptonotus schwarzi Crawford.

Zaglyptonotus schwarzi new species.

Female: Length about 3 mm.; ovipositor about 3.5 mm. Green with a brassy tinge; antennæ brown, the scape and pedicel green; vertex and dorsum of mesothorax rugoso-punctate on front of mesoscutum and parasidal areas the sculpture aciculate in somewhat diamond shapes as in many species of *Monodontomerus;* wings hyaline; legs green, the tibiæ brown, with only a slight greenish tinge, the tarsi testaceous.

Type locality: San Diego, Texas. Type specimen, Cat. No. 18178 U. S. N. M. Described from three females labelled "24.4" (April 24) E. A. Schwarz, collector.

DESCRIPTIONS OF TWO NEW SPECIES OF STREPSIPTERA PARASITIC ON SUGAR CANE INSECTS.

By W. Dwight Pierce, *Bureau of Entomology.*

Although the order Strepsiptera is composed entirely of parasitic insects, the majority of the species of which the hosts are known attack insects of no great economic importance. For a number of years the entomologists of Hawaii sought in various parts of the world parasites of the sugar cane leaf hoppers, including the Strepsiptera in their searches. They brought to light several interesting species, parasitic on different leaf hoppers (Homoptera).

I am now able to describe two additional species of Halictophagidæ important as enemies of sugar cane leaf hoppers from the two hemispheres. One was obtained in very large numbers by Mr. Thomas H. Jones of Porto Rico at Rio Piedras, as a parasite of the destructive *Stenocranus saccharivorus* Westwood, the other was found by Mr. C. S. Misra, at Pusa, India, as a parasite of the sugar cane fly of India, *Pyrilla* sp. The sugar cane leaf hopper of Fiji, *Perkinsiela vitiensis* Kirkaldy has already been recorded as commonly parasitized by an Elenchid, *Elenchoides perkinsi* Pierce.

The genus *Stenocranus* belongs to the Fulgorid family Delphacidæ, and the genus *Pyrilla* belongs to the Fulgorid family Lophopidæ.

Family **Halictophagidae.**

Subfamily ANTHERICOMMINAE.

Stenocranophilus new genus.

Male: Head excavated behind, seen from above consisting of a narrow arcuate rim supporting the eyes and produced considerably in front of these